

Contents

Marine Chemistry, Vol. 59 (1998)

Isotopic and elemental characterization of colloidal organic matter from the Chesapeake Bay and Galveston Bay L. Guo and P.H. Santschi	1
Diffusion and reactions in the vicinity of plankton: A refined model for inorganic carbon transport D. Wolf-Gladrow and U. Riebesell	17
Stable nitrogen and carbon isotopes as indicator of eutrophication of the Oder river (Baltic sea) M. Voß and U. Struck	35
An absorbance-based fiber-optic sensor for CO _{2(aq)} measurement in porewaters of sea floor sediments B. Hales, L. Burgess and S. Emerson	51
An improved chromatographic method to measure nitrogen, oxygen, argon and methane in gas or liquid samples S. An and S.B. Joye	63
Environmentally relevant precursors of carbonyl sulfide in aquatic systems O.R. Flöck, M.O. Andreae and M. Dräger	71
The global Cd/phosphate relationship in deep ocean waters and the need for accuracy B.M. Löscher, J. van der Meer, H.J.W. de Baar, P.M. Saager and J.T.M. de Jong	87
The influence of zinc, aluminum and cadmium on the uptake kinetics of iron by algae J.M. Santana-Casiano, M. González-Dávila, L.M. Laglera, J. Pérez-Peña, L. Brand and F.J. Millero	95
Interference effects in the extraction of trace metals from estuarine waters D.J. Mackey, J.E. O'Sullivan, R.J. Watson and G. Dal Pont	113
Seasonal and depth variability of reduced sulphur species and metal ions in mud-flat pore-waters of the Venice lagoon A. Bertolin, G.A. Mazzocchin, D. Rudello and P. Ugo	127
The use of ³ H and tritogenic ³ He to determine CFC degradation and vertical mixing rates in Framvaren Fjord, Norway S.D. Shapiro, P. Schlosser, W.M. Smethie Jr. and M. Stute	141
Behaviour of anthropogenic mercury in coastal marine sediments C. Gagnon, É. Pelletier and A. Mucci	159
Water quality changes in an episodically flushed sub-tropical Australian estuary: A 50 year perspective B. Eyre	177
Spatial and temporal variations of surface seawater f _{CO₂} in the Kuroshio off Japan A.M. Murata, I. Kaneko, K. Nemoto, K. Fushimi and M. Hirota	189
Increase of carbon dioxide in the bottom water of the Weddell Sea, Antarctica M. Hoppema, E. Fahrbach, M.H.C. Stoll and H.J.W. de Baar	201
Vertical cycling of Cu and Ni in the western North and Equatorial Pacific S. Noriki, Y. Arashitani, M. Minakawa, K. Harada and S. Tsunogai	211
Production and transport of long-chain alkenones and alkyl alkenoates in a sea water column in the northwestern Pacific off central Japan K. Sawada, N. Handa and T. Nakatsuka	219

The vertical distribution of the strong ligand in particulate organic matter in the North Pacific K. Hirose and E. Tanoue	235
Vertical profiles of nitrous oxide and dissolved oxygen in marine sediments T. Usui, I. Koike and N. Ogura	253
Dissolved organic iodine in marine waters: Determination, occurrence and analytical implications G.T.F. Wong and X.-H. Cheng	271
Variability in the speciation of iron in the northern North Sea M. Gledhill, C.M.G. van den Berg, R.F. Nolting and K.R. Timmermans	283
Dissolved organic matter and nutrients in the Lena River, Siberian Arctic: Characteristics and distribution R.J. Lara, V. Rachold, G. Kattner, H.W. Hubberten, G. Guggenberger, A. Skoog and D.N. Thomas	301
Production of methyl bromide and methyl chloride in laboratory cultures of marine phytoplankton II M.G. Scarratt and R.M. Moore	311
Photolysis of dimethylsulfide in the northern Adriatic Sea: Dependence on substrate concentration, irradiance and DOC concentration A. Brugger, D. Slezak, I. Obernosterer and G.J. Herndl	321

